

Mathematics and Poetry

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I have loved poetry since girlhood, but mathematics offered the scholarships. So, I studied mathematics (which I also loved) and eventually became a math professor. While a professor I discovered ways that math-poetry links can enrich classroom learning.

Now retired, I've wanted to share my collection of math-related poems (a few by me, most by other poets) and have developed a blog -- at *PoetryWithMathematics.blogspot.com* with almost a thousand posts since its start in 2010.

What follows is a sampler – a collection of excerpts from some verses I've collected about mathematical people. The complete poems may be found by entering the name of the poet or the mathematician in the blog's SEARCH feature.

Poems about Math People

Mathematician and scientist **Émilie du Châtelet** explained Newton's physics but was not as remembered for her own work as she should have been. Here are several lines about her from Voltaire's "The Divine Émilie."

Here's a portrait of my Émilie:

...
She has, I assure you, a genius rare.
With Horace and Newton, she can compare.

Mathematician **William Rowan Hamilton** wrote a sonnet to the memory of **Joseph Fourier** (Robert Perceval Graves, *Life of Sir William Rowan Hamilton* [Hodges, Figgis, & Co., 1882], 596). It begins:

Fourier! with solemn and profound delight,
...
I gaze upon thy glory and grow bright:
As if irradiate with beholden light;

Jonathan Holden opens his poem "**Ramanujan**" (*UR-Math*, [State Street Press, 1997], 24–25) with these words:

This modest, mousy little boy from India
could reel off pi's digits to any
decimal place his classmates dared him to.

In "A Mere Girl," Brian McCabe wrote of **Sophie Germain** (*Zero* [Polygon, 2009], 53):

you warmed your mind with calculus,
cut your hair and dressed as a man,
replaced a drop-out from the Academy.

Jo Pitkin wrote in "Bird, Moon, Engine" of **Ada Lovelace** (*Raising Lilly Ledbetter: Women Poets Occupying the Workplace*, ed. Caroline Wright, M. L. Lyons, and Eugenia Toledo [Lost Horse Press, 2015], 94):

By age five, I could plot the arc of a rainbow.
I could explain *perpendicular* and *parallel*.
In my mind, I heard the wind in wild weeds.

Some poems are about mathematicians who are not famous. The following pair of samples offer poetic portraits of day-to-day mathematicians. First Cathryn Essinger writes with humor about her brother in "You Are Right" (*Strange Attractors: Poems of Love and Mathematics*, ed. Sarah Glaz and JoAnne Grownney, [A K Peters/CRC Press, 2008], 152).

In your super-logical,
analytical,
bumbling way . . .

Here, a very different portrait, from mathematician **Sherman Stein**'s poem, "Mathematician," (*Humanistic Mathematics Network Journal*: Iss. 13, Art. 7, 1996):

In truth, she is not here
In this room, bound by these walls.
She journeys beyond the moon,
the sun, the start, out of our galaxy . . .

Ronald Wallace has fun with math words in "Mr. Glusenkamp," which celebrates a geometry teacher (*Long for This World: New and Selected Poems*, [Univ. of Pittsburgh Press, 2003], 64). Here are a few lines:

No one could have been squarer,
and nothing could have been plainer
than his geometry.

A visit to the blog "Intersections – Poetry with Mathematics" at <https://poetrywithmathematics.blogspot.com> will enable you to SEARCH and find the poems sampled above as well as portraits of a variety of other mathematicians -- including Benjamin Banneker, Janos Bolyai, Lewis Carroll, René Descartes, Leonhard Euler, Caroline Herschel, Hypatia, Katherine Johnson, Sofia Kovalevsky, Lillian Lieber, Ada Lovelace, Benoit Mandelbrot, Florence Nightingale, Emmy Noether, Pythagoras, Vera Rubin, Norberto Salinas, Alan Turing, and ALSO lots of poems about mathematics.

JoAnne Grownney—at [japoet\(at\)msn\(dot\)com](mailto:japoet(at)msn(dot)com)—is professor emeritus at Bloomsburg (PA) University and now lives in Silver Spring, MD. In the late 1980s she read a biography of mathematician **Amalie "Emmy" Noether** -- and this reading provoked a poem, "My Dance is Mathematics" (first published in *Mathematics Magazine* Vol. 68, No. 6 (1995)) and now shared around the world. It speaks of the discrimination that Noether faced, and ends with these lines:

Today, history books proclaim that Noether
is the greatest mathematician
her sex has produced. They say she was good
for a woman.